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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,676	11/25/2003	Lloyd G. Ratchford	111418.00420	6269
27557	7590	11/18/2004	EXAMINER	
BLANK ROME LLP 600 NEW HAMPSHIRE AVENUE, N.W. WASHINGTON, DC 20037			TA, THO DAC	
			ART UNIT	PAPER NUMBER
			2833	

DATE MAILED: 11/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/720,676

Applicant(s)

RATCHFORD, LLOYD G.

Examiner

Tho D. Ta

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2 and 4-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 7-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 recites the limitation "the cable ferrule" in line 8. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 4-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over de La Cruz et al. (6,616,482) in view of Saito et al. (6,428,364).

In regard to claim 1, De La Cruz et al. discloses a contact positioning assembly for a cable comprising: a plurality of contacts 11 attached to conductors 4 of an electrical cable 2, the conductors 4 secured in radially outward facing U-shaped slots 35 of a first spacer 34 for positioning the conductors 4, the number of slots 35 corresponding to the number of conductors 4 so that each slot 35 holds a single conductor 4 (column 4, lines 33-37); wherein the first spacer 34 is generally cylindrical-

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shaped with the slots 35 equally spaced around its circumference around its circumference; and wherein a base portion (adjacent 42) of the first spacer 34 engages rings 12 on the contacts 11 to hold the contacts 11 in a secure position to prevent the contacts 11 from sliding (fig. 1, column 4, lines 33-37).

However, De La Cruz does not disclose that the slots 35 are sized smaller than an outside diameter of the conductors 4 so as to provide a frictional interference between the slots 35 and conductors 4 for securely holding the conductors 4 in the slots 35.

Saito et al. discloses that the slots 53, 54 are sized smaller than an outside diameter of the conductors 50 so as to provide a frictional interference between the slots 53, 54 and conductors 50 for securely holding the conductors 50 in the slots 53, 54, thereby facilitating pressure-welding work of the conductors 50 (column 9, lines 10-15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify De La Cruz et al invention by constructing the slots as disclosed by Saito et al. in order to facilitate the coupling of the conductors and thus the assembling time of a worker would be reduced.

In regard to claim 2, De La Cruz et al. discloses that there are four slots 35 and four conductors 4.

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In regard to claim 4, De La Cruz et al. discloses that the slots 35 are separated by walls 44, the walls 44 extending above the slots 35 and abutting a cable ferrule 10, the ferrule 10 securing the first spacer 34 between itself and the rings 26.

In regard to claim 5, De La Cruz et al. discloses that a second spacer 24 that slides over the contacts 11 and is positioned adjacent the first spacer 34.

In regard to claim 6, De La Cruz et al. discloses that the first spacer 34 is made of a dielectric material to provide electrical shielding.

In regard to claim 7, De La Cruz et al. discloses a spacer for positioning conductors 4 of an electrical cable 2 comprising: a generally cylindrical spacer 34 having U-shaped slots 35 equally spaced around the circumference of the spacer 34, the slots 35 having openings facing radially outward and the slots 35 being adapted to hold a single conductor 4 (column 4, lines 33-37); wherein a base portion (adjacent 42) of the spacer 34 is adapted to abut and secure contact rings 12, wherein the spacer 34 is secured between the cable ferrule 10 and the contact rings 12.

However, De La Cruz does not disclose that the slots 35 being dimensioned slightly smaller than the diameter of the conductors 4 so as to provide frictional interference to hold the conductors 4.

Saito et al. discloses that the slots 53, 54 are sized smaller than an outside diameter of the conductors 50 so as to provide a frictional interference between the

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slots 53, 54 and conductors 50 for securely holding the conductors 50 in the slots 53, 54, thereby facilitating pressure-welding work of the conductors 50 (column 9, lines 10-15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify De La Cruz et al invention by constructing the slots as disclosed by Saito et al. in order to facilitate the coupling of the conductors and thus the assembling time of a worker would be reduced.

In regard to claim 8, De La Cruz et al. discloses that the spacer 34 is made of a dielectric material.

In regard to claim 9, De La Cruz et al. discloses that the slots 35 are separated by walls 44 that extend above the slots 35, a top portion of the walls 44 being adapted to abut a cable ferrule 10.

Response to Arguments

5. Applicant's arguments filed 8/30/04 have been fully considered but they are not persuasive.

In response to applicant's arguments that "De La Cruz et al. does not disclose that a base portion of a spacer engages rings on the contacts...". Contrary to applicant's argument, De La Cruz et al. discloses in fig. 1 and column 4, lines 33-37 that a base portion (adjacent 42) of a spacer 34 engages rings 12 on the contacts 11.

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In response to applicant's arguments that Saito et al. do not disclose or suggest rings on contacts. Examiner only applied Saito et al. for the teaching of the slots being dimensioned slightly smaller than the diameter of the conductors. Further, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tho D. Ta whose telephone number is (571) 272-2014. The examiner can normally be reached on M-F (8:00-5:30).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (571) 272-2800 ext 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



THO D. TA
PRIMARY EXAMINER

tdt
05/25/04